



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/657,646 | 09/08/2003 | Jani Vare | 004770.00136 | 2839 |

22907 7590 05/05/2006

BANNER & WITCOFF
1001 G STREET N W
SUITE 1100
WASHINGTON, DC 20001

| |
|----------|
| EXAMINER |
|----------|

LE, DANH C

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2617

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|-----------------------------|--|
| Office Action Summary | Application No. 10/657,646 | Applicant(s) VARE ET AL. | |
| | Examiner DANH C. LE | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34, 46 and 47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 and 26 is/are allowed.
- 6) ☒ Claim(s) 1-18, 21-24, 27-34, 46 and 47 is/are rejected.
- 7) ☒ Claim(s) 19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3/28/06, 4/12/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Interview

1. Applicant's request for reconsideration of the Non-Final Rejection of the rejection of the last Office action is persuasive and, therefore, the Non-Final rejection of that action is withdrawn.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 4/12/06 and 3/28/06 have been considered by the examiner and made of record in the application file.

Election/Restrictions

3. Applicant's election without traverse of claims 1-34, 46, 47 in the reply filed on 4/12/06 is acknowledged.

Claim Rejections - 35 USC § 112

Claims 22-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 22-24 are computer program claims dependent on the method claim

- 1.

Election/Restrictions

4. Applicant's election without traverse of claims 1-34, 46, 47 in the reply filed on 4/12/06 is acknowledged.

Claim Rejections - 35 USC § 112

Claims 22-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 22-24 are computer program claims dependent on the method claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-3, 5, 6, 8, 9, 14-17, 21, 27, 29, 31, 33 are rejected under 35

U.S.C. 102(a) as being anticipated by Shahrier (US 2002/0154638).

As to claim 1, Shahrier teaches a method for supporting a geographical-based service for at least one terminal (figure 1, 6) node in a communications system, the method comprising:

determining a first geographical position that, is associated with a first terminal node;

inserting the first geographical position into a message header of a first datagram, and

sending, by the first terminal node, the first datagram.

As to claim 2, Shahrier teaches the method of claim 1, wherein the first geographical position is indicative of an approximate location of the first terminal node (paragraph 0014, 0049).

As to claim 3, Shahrier teaches the method of claim 1, wherein the first geographical position is indicative of an approximate destination position (paragraph 0014, 0049).

As to claim 5, Shahrier teaches the method of claim 1, wherein (a) comprises obtaining the first geographical position from a serving network.

As to claim 6, Shahrier teaches the method of claim 1, wherein (a) comprises obtaining the first geographical position through a user interface.

As to claim 8, Shahrier teaches the method of claim 1, wherein (b) comprises selecting a selected datagram and inserting the geographical position into a message header of the selected datagram (paragraph 0049).

As to claim 9, Shahrier teaches the method of claim 1, further comprising inserting an indicator into the first datagram, wherein the indicator restricts processing of the first geographical position by another entity of the communications system.

As to claim 14, Shahrier teaches the method of claim 1, wherein the communications system comprises a wireless system and the first terminal node comprises a mobile node.

As to claim 15 Shahrier teaches the method of claim 1, wherein the first terminal node is selected from the group consisting of a wireless telephone, a workstation, a personal computer (PC), and a stationary communications device.

As to claim 16, Shahrier teaches the method of claim 1, wherein (a) comprises selecting a technique for determining the first geographical position.

As to claim 17, Shahrier teaches the method of claim 16, further comprising inserting a technique identification into the message larder of the first datagram, the technique identification identifying the selected technique for determining the first geographic region.

As to claim 21, Shahrier teaches the method of claim 1, wherein the first datagram fit contained in a stream of datagrams.

As to claim 27, Shahrier teaches a method for supporting a geographical-based service for at least one terminal node in a communications system (figure 1 and 6), the method comprising:

receiving a datagram from a mobile node, by a serve, the datagram, supporting the geographic-based service, a message header of the containing a geographical position the mobile node, extracting the geographical position from the datagram and providing the geographical-based service for the mobile node, based on the geographical position.

As to claim 29, Shahrier teaches a method for supporting a geographical based service for at least one terminal node in a communications system, the method comprising:

receiving, by a content server, a datagram from a mobile node, by a server, the datagram indicating a query or a service configuration that is supported by the content server, a message header of the datagram containing a geographical position of mobile

node, extracting the geographical position from the datagram, and sending configuration information that indicates a set of services, the set of services being supported by the content server in a service area, the geographic position being within the service area.

As to claim 31, Shahrier teaches a method for supporting a geographical-based service for at least one terminal node in a communications system (figure 1 and 6), the method comprising:

receiving a datagram from a mobile node, by an attachment point, the datagram supporting the geographical-based service;

determining, by the attachment point, whether the datagram contains a geographical position that is associated with the mobile node,

if the datagram does not contain the geographical position, inserting by the attachment point, an alternative geographical position, the alternative geographical position being associated with the attachment point; and

transmitting the datagram to a destination address.

As to claim 32, Shahrier teaches a method of claim 31, wherein (d) comprises passing the datagram through a router based on the geographical position.

As to claim 33, the claim is an apparatus of claim 31; therefore, the claim is interpreted and rejected as set forth as claim 31.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shahrier.

As to claim 7, Shahrier teaches the method of claim 1, Shahrier fails to teach comprises acquiring the geographical position by utilizing a time difference of arrival (TDOA) technique. However, the examiner takes Official Notices that the time difference of arrival (TDOA) technique is known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of TDOA technique into the system of Shahrier in order to enhance the system performance of the internet protocol layer.

7. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shahrier in view of Nakasugawar (US 20040004967).

As to claim 10, Shahrier teaches the method of claim 1 which comprises inserting the first geographical location into an extension header of the first datagram. Shahrier fails to teach the datagram complies with an internet Protocol version 6 (IM) specification. Nakasugawar teaches internet Protocol version 6 (IM) specification (Nakasugawar paragraph 219). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Nakasugawar into the system of Shahrier in order to send and receive a registration response message.

As to claim 11, the combination of Shahrier and Nakasugawar teaches the method of claim 10, wherein the extension header comprises a destination option header (Shahrier figure 5).

As to claim 12, the combination of Shahrier and Nakasugawar teaches the method of claim 10, wherein the extension header comprises a hop-by-hop header (Nakasugawar paragraph 219).

8. Claims 13, 28, 30, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shahrier in view of Nakasugawar (US 20040004967) and Aggawal (US 2004/0221154).

As to claim 13, the combination of Shahrier and Nakasugawar teaches the method of claim 1, inserting into the message header of the first datagram, indicative of a serving area for the geographical-based service. The combination of Shahrier and Nakasugawar fails to teach a specified radius. Aggawal teaches a specified radius (paragraph 0020). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aggawal into the system of Shahrier and Nakasugawar in order to define the service region.

As to claim 28, the limitation of the claim is the same limitation of claim 13; therefore, the claim is interpreted and rejected as set forth as claim 13.

As to claim 30, the limitation of the claim is the same limitation of claim 13; therefore, the claim is interpreted and rejected as set forth as claim 13.

As to claim 34, the limitation of the claim is the same limitation of claim 9; therefore, the claim is interpreted and rejected as set forth as claim 9.

9. Claims 4, 18, 28, 46, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shahrier in view of Nakasugawar (US 20040004967) and Brown (US 6,157,621).

Art Unit: 2617

As to claim 4, Shahrier teaches a method of claim 1, which acquires the geographic position by the terminal node with determination module. Shahrier fails to teach the GPS. Brown teaches the GPS (col.6, lines 21-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Brown into the system of Shahrier in order to send and receive a registration response message.

As to claims 18, the combination of Shahrier and Brown teaches the method of claim 1, wherein the first geographical position comprises an approximate longitude and approximate latitude of a position of terminal node (col.21, lines 1-7).

As to claims 18, the combination of Shahrier and Brown teaches the method of claim 27, wherein (c) comprises Sending a request to a broadcast network based on the geographical position, the Request instructing the broadcast network to deliver geographical-based service to another mobile node in a service area, the service area being specified by a destination position and a specified radius (col. 20, lines 35-65)..

As to claim 46, Shahrier teaches a method for supporting a geographical-based service for at least one mobile node in a wireless communications system, the method comprising:

acquiring a geographical position by a mobile node with location determination module, the geographical position indicative of a location of the mobile node, the geographical position, inserting the geographical position into an extension header of a

Art Unit: 2617

datagram, the datagram supporting the geographical-based service, wherein the datagram complies with an Internet Protocol; and sending, by the mobile node, the datagram.

Shahrier fails to teach a Global Position Satellite (GPS) module comprising an approximate latitude and an approximate longitude and Internet Protocol version 6 (IM) specification. Brown teaches a Global Position Satellite (GPS) module comprising an approximate latitude and an approximate longitude (col.6, lines 21-48 and col.21, lines 1-7). Nakasugawar teaches Internet Protocol version 6 (IM) specification (paragraph 219). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Brown and Nakasugawar into the system of Shahrier in order to send and receive a registration response message.

As to claim 47, the limitation of the claim is the same limitation of claim 9; therefore, the claim is interpreted and rejected as set forth as claim 9.

Allowable Subject Matter

Claims 19, 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As claims 19 and 20, the teaching of above prior arts either alone or in combination fails to teach further comprising receiving, by another terminal node, the first datagram, determining another geographical position, the other geographical position being associated with the other terminal node and if the other terminal node is within an approximate circular area, accenting the first datagram, wherein the

approximate circular area is specified by the specified radius in relation to the first geographical position.

Claims 25, 26 are allowed.

As claims 19 and 20, the teaching of above prior arts either alone or in combination fails to teach further comprising if the service are within a circular area, include the identification of the service in a filter to the designate that the service is acceptable, receive a datagram that support the service, if the service is acceptable, accept the datagram and if the service is not accept, rejecting the datagram.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C. LE whose telephone number is 571-272-7868. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/657,646
Art Unit: 2617

Page 12

A handwritten signature in black ink, appearing to read "danh", with a long horizontal line extending to the right.

April 20, 2006.

DANH CONG LE
PRIMARY EXAMINER